

Title (en)
Gas sensor and method of producing the same

Title (de)
Gassensor und dessen Herstellungsverfahren

Title (fr)
Capteur de gaz et son procédé de fabrication

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EP 1215492 A3 20040303 (EN)

Application
EP 01204821 A 20011210

Priority
US 74035400 A 20001218

Abstract (en)
[origin: EP1215492A2] A gas sensor, comprising an oxygen pump cell with a first pump electrode (40) and a second pump electrode (42) disposed on opposite sides of a first solid electrolyte layer (30) and a second pump electrode (42). The sensor also comprises an emf cell with an emf electrode (44) and a reference gas electrode (46) disposed on opposite sides of a second solid electrolyte layer (32). The emf electrode (44) is disposed in fluid communication to the second pump electrode (42). A via hole (50) is disposed through the first solid electrolyte layer (30), such that the first pump electrode (40) is in fluid communication with the second pump electrode (42). A protective insulating layer (20), having a passage for gas to be sensed, is disposed in contact with the first pump electrode (40). A first insulating layer (22), having a conduit (54), is disposed in contact with the emf electrode (44). A second insulating layer (24), having an air channel (56), is disposed in contact with the reference gas electrode (46). A heater (60) is disposed in thermal communication with the emf cell. At least four electrical leads are in electrical communication with the sensor. A method of producing a gas sensor is disclosed. <IMAGE>

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G01N 27/407; **G01N 27/419**

IPC 8 full level
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CPC (source: EP US)
G01N 27/419 (2013.01 - EP US)

Citation (search report)
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